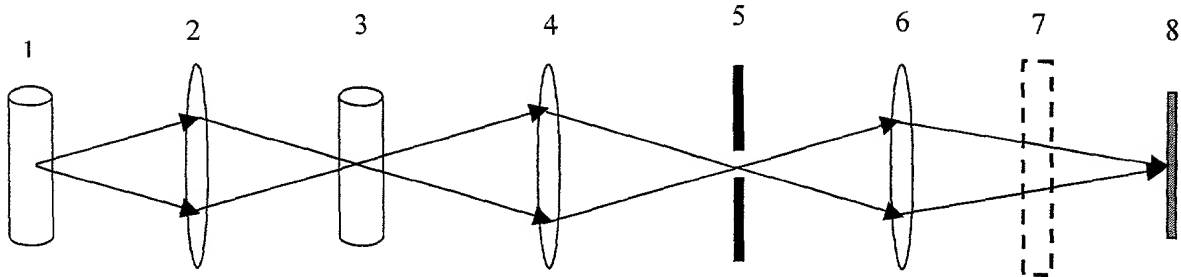


Fig.1

Preferred embodiment of the COILS illuminator



1. Lamp #1
2. First optical system which forms a first image of Lamp 1 at a first focal position
3. Lamp #2 located at the first focal position
4. Second optical system which forms a second image of Lamp # 2 at a second focal position and relays the first image of Lamp # 1 from the first focal position to the second focal position
5. Aperture stop
6. Third optical system for focusing the radiation transmitted by the aperture stop
7. Polarizing optics
8. Sample

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Fig. 2

Illustration demonstrating use of the COILS illuminator in a spectroscopic reflectometer: beam-splitter (9) is used to permit illumination at normal incidence, polarizing optics (7) is inserted when polarized beam spectroscopic reflectometry measurements are made

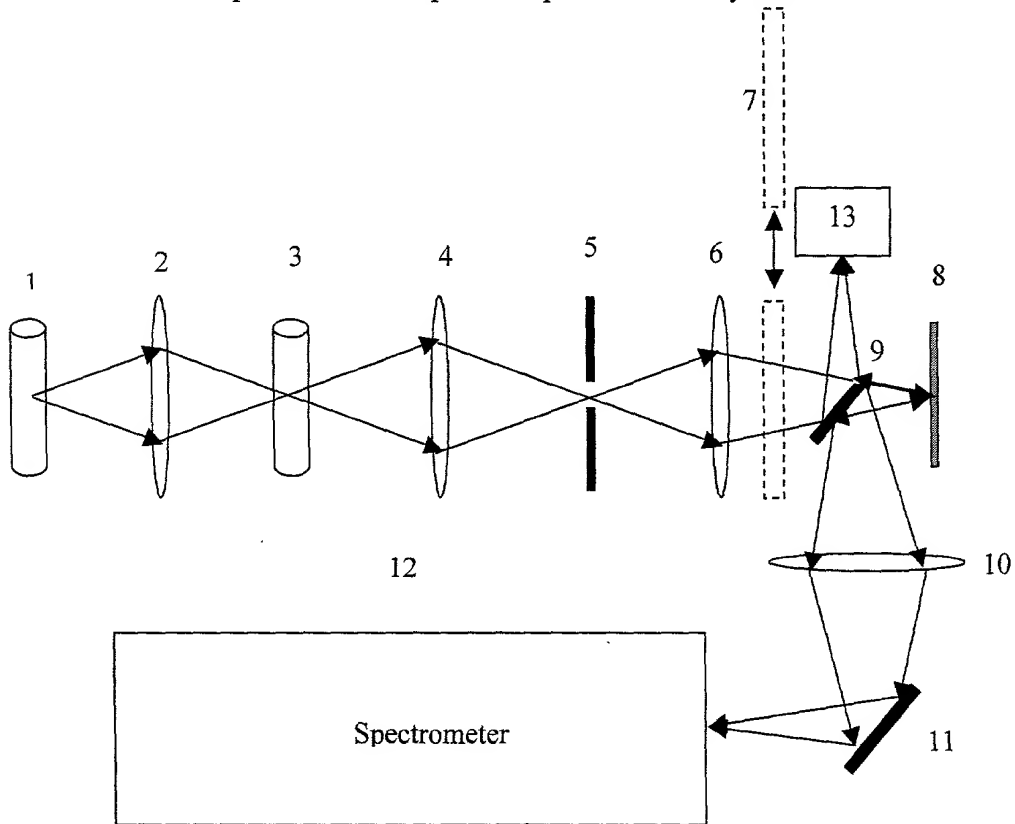
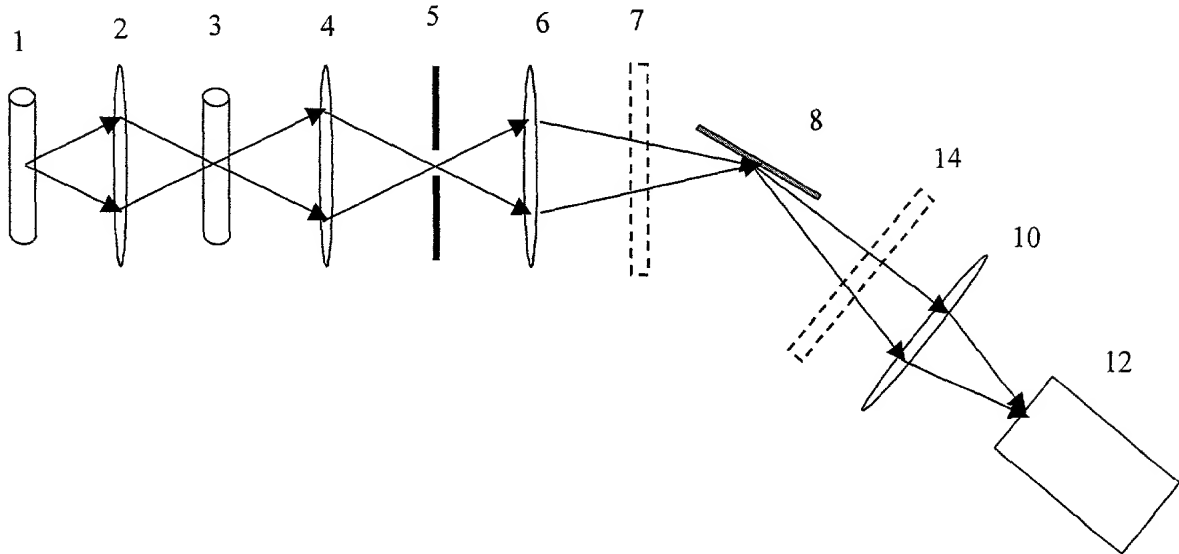


Fig. 3

COILS illuminator configured for a spectroscopic ellipsometer



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Fig. 4

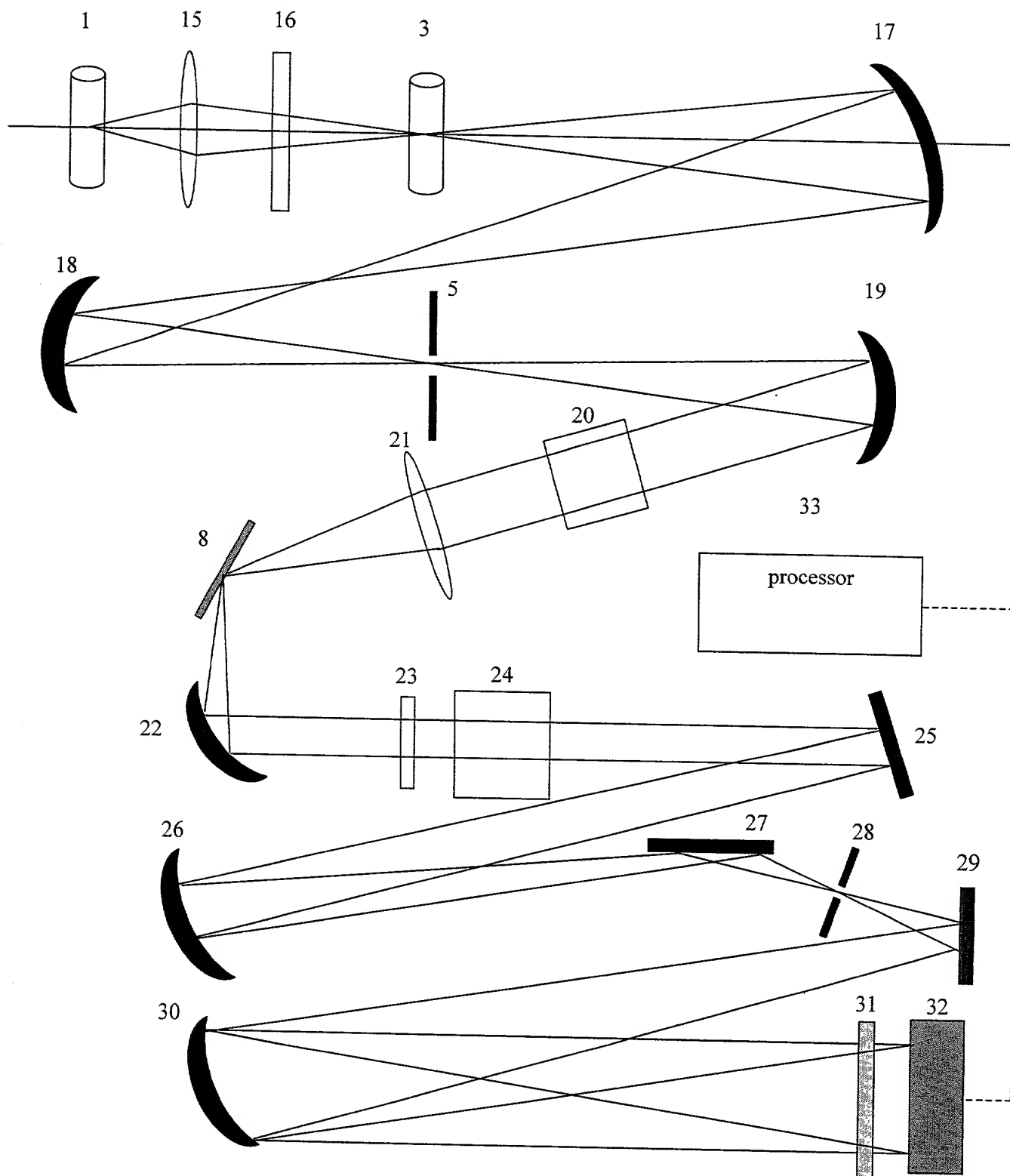


FIG. 4